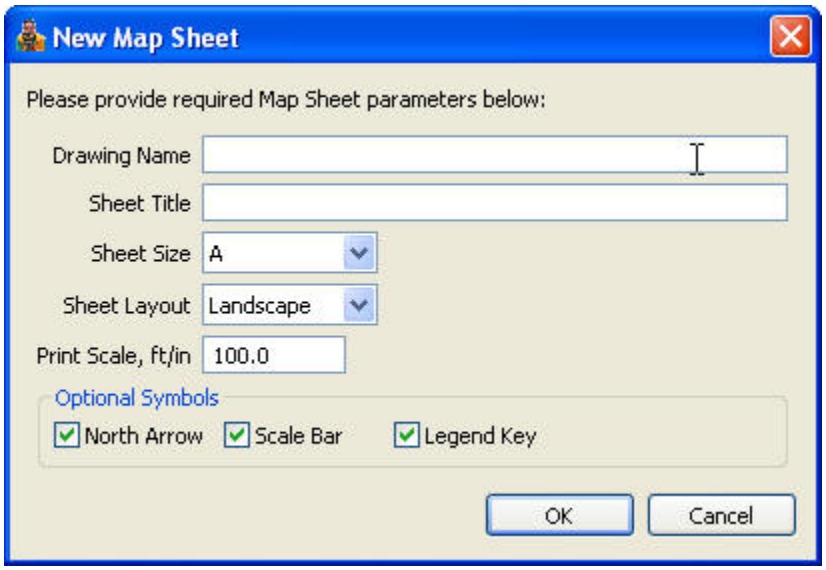
Map Sheet Tips

The Map Sheet printing subsystem provides the capability to print out SET surveys and designs on a number of sheets. The user controls how many sheets, at what size, print scale, which map-layers are shown and how they are configured. The following sections describe how to use the various functions.

Core Map Sheet Functions

To **create** a Map Sheet, right-click on the Sheet Data item in the Legend at the left side of the EFT Map view, and select the New Map Sheet item. A dialog appears:



User just needs to fill in the blanks.

The Drawing Name should be short. The Sheet Title can be fairly long. This title will be the title printed in the title block of the actual hard-copy output. Sheet size and layout are self-explanatory. The print scale will control how many surveyed feet appear in an inch on the hard-copy. This should be chosen to be useful to the contractor or reviewer.

The “Optional Symbols” section lets the user turn off the symbols listed. These should be left on when printing design data for contractors, but can be turned off when the user is generating a print for internal use, and would rather use the whole print area for data.

When the user OKs this dialog, the dialog closes and the system drops a black rectangle outline onto the map. This rectangle shows the **viewport** onto the map – how much of the map data can be included in a map-sheet of the requested size, orientation and print scale. Click on the rectangle, and drag it so that it contains the area of interest on the map. This completes initial creation of a map sheet.

The map sheet will appear as an item in the Legend at the left side of the EFT Map view, under the Sheet Data topic, named with the Drawing Name provided in the dialog.

Once the map sheet item appears in the Legend, the user can access many map sheet functions by selecting the sheet by name in the Legend, then right-clicking to bring up the **map sheet menu**. This menu includes tools to preview (and print) a map sheet, to edit the basic parameters of the sheet, to move the sheet's viewport across the map, and to control the presentation of map-layers on the map and map-sheet.

The **Preview Sheet** menu item will run the selected map-sheet as a single report. This will generate the map sheet image and present it in a PDF viewer. The user can inspect the results to see if the map sheet is configured correctly. The user can also send the results to the printer, if the single sheet is all he needs at the moment. When polishing a set of map-sheets for final report output, the user might need to use this preview capability many times.

When printed, the map sheet will show the same layers as selected at the time it was created. It will include the data in the outlined viewport area, and will provide a standard title block using information from the “Info” tab of the SET tool, plus the sheet title provided in the dialog above. All of this can be changed when needed.

There are several ways to modify existing map sheets, all accessed via the map sheet menu. The **Edit Params** menu item will bring up the same dialog as shown above. The user can edit the sheet title, page size and layout, etc. (The drawing name cannot be edited.) If page size, layout, or print scale are edited, the map sheet's viewport rectangle will be resized to reflect the new data, while retaining the same reference point (lower-left corner of the viewport).

The **Move Sheet** function will activate the same drag-rectangle operation as provided when the map sheet was created. The user can click in the rectangle and drag it to enclose the new area of interest on the map. Together with the Edit Params operation, this allows the user to change the scale of the map sheet and relocate it to suit.

The presentation of map layers on the map sheet hard-copy can be controlled separately by each map sheet. As already described, the map sheet initially adopts the map-layer configuration which is in effect when it is created. The map sheet menu provides means to tweak the map-layer configuration later.

For one thing, the user can simply change the map-layer configuration in the active EFT Map window, and then use the **Save Map-Layer Config** menu item. This will apply the map presentation configuration as presently shown on the EFT Map view to the selected map sheet.

However, if the map presentation on the EFT Map has been changed a lot since the map sheet was created, this approach would involve a lot of fiddling with the map layers. In this case, it is more efficient to use the **Restore Map-Layer Config** menu option first. This Restore option will apply the map-layer configuration which was stored in the map sheet to the EFT Map, so that the live EFT Map view will show the layers just as they would be presented by the map-sheet. The user can then tweak just a few settings, to get the presentation the way it should be, and can then use the **Save Map-Layer Config** menu option to save the revised presentation configuration to the map sheet.

Naturally, the menu provides a **Delete Sheet** option. This allows the user to discard a map sheet setup which is no longer needed.

Batch mode printing

The map sheets can be printed singly via the Preview Sheet menu item already described. However, they can also be printed in batches, along with other reports if needed. Batch reports can be run from the File menu, or from the Overview tree view.

The content of the File menu is context-sensitive, so **to print from the File menu**, the user must first click on the SET editor tab (alongside the Overview tab, showing the name of the SET design). Then, on the File menu, select the Print Survey Reports option. This will pop up a dialog containing a tree of items. A header section will appear first, a Footer section last. In between will be an item bearing the same name as the SET design. Under that heading will appear the list of available reports, which will include the Map Sheets item. Check the box alongside the Map Sheets report and a second wizard page will appear, listing the map sheets defined for the SET design. Select as many of these as desired, and OK the report request. All selected map sheets (and whatever other reports the user checked) will be prepared and presented in the PDF viewer. The reports will be numbered together in a single page-number sequence, for presentation to the reviewer or contractor.

To print from the Overview tree view, the user can click on either an SET design item or on a Project folder item. In either case, the right-click menu will include the Print Reports option. Selecting this option will open the same report tree dialog as described above. The report tree dialog will always have one header section and one footer section. However, if the user launched the dialog by clicking on a Project folder, the report tree will have entries for each design file in that project, not just one SET design. This will allow printing maps (and other reports) from multiple design files as one output package, when that is convenient.

In either case, printing reports in batch mode can create a single PDF file containing pages of mixed sizes and orientations. PDF viewer has no trouble with this. However, the user will typically want to select pages and send them to appropriate printers. For instance, a regular printer can't handle D-size plots, and a D-size plotter is pretty expensive to use for regular print pages!

Tips

Map Sheet definitions are stored in the design data file of the tool where they were created. A map sheet created in an SET design will be visible, editable and printable from that SET design only. Map sheets are local data, not known system wide.

Keep Drawing Names short. These appear in the Legend and in the report tree dialog, so making map sheet names long just makes these tools slower to use.

Don't write too much into the Sheet Title field. The dialog doesn't enforce a limit, but exceptionally long titles will cause trouble in hard-copy – map sheets will roll over onto an extra page to get all the data into the title block.

Do use the Preview Sheet tool. This is handy to check whether the map sheet setup is the

way it should be, without the expense of creating a color hard-copy to check it.

Notes from the Developers

The ability of the Map Sheet to save a complex map-layer configuration makes the map sheets a handy tool to control the EFT Map display. The user can define map sheets which he never means to print, just to use them to store a map presentation setup for later recall. He can restore that map presentation using the map sheet menu, Restore Map-Layer Config item. This can allow the user to switch rapidly between very different map presentation styles. Because this is so easily done via the Map Sheet tools, we haven't bothered to implement this elsewhere.

We have not yet provided functions to move the north arrow, scale bar and legend block around on the map sheets. This is planned for a future release.

We have not yet provided means to import map sheets from another design. It is not clear whether we should. Different designs tend to be too far separated on the map for their map sheets to be shared. However, in the case of multiple designs in a single Project on a single site, this might be useful. Let us know.

We have not provided means to resize the map-sheet viewport by resizing the rectangle on the map view, *and we don't plan to*. This always results in useless map scales, like 73.27 ft/in. With such a scale, a hard-copy becomes only a qualitative view: one can get some understanding of the shape of a feature, but no-one can measure anything off of the print. Type in the print scale needed in the dialog, and remember that the contractors need to measure things!

In the current release, margins on the map sheets don't comply exactly with standards defined to allow stapling the map-sheets into a handout. We plan to fix this in a future release. Let us know how urgent this is.

Support contact

Kip Yasumiishi is the go-to guy for support on this product. He can route your questions, issues, bug reports and change requests to the developers.